

## REMARKS

Claims 16 and 17 have been added. An example of an “SGSN” is shown as “31” in the drawings and is discussed on page 9 (lines 18 and 22), as well as other locations throughout the application. Claims 1-8 have been amended to highlight different units that are part of the node. Claim 9 has been amended to reference the steps being performed. Claim 13 has been amended to highlight that the recording medium is encoded with a program that can be executed by a computer. Claims 1-17 are currently pending in the application.

### **Rejection of Claims 13-15 As non-statutory subject matter under 35 U.S.C. § 101**

As noted in paragraph [0055] “the operation flows shown in FIGS. 5 and 6 can be stored on a record medium as a program, and can be read by a computer for execution”. Thus, the specification does provide clear support for a record medium as claimed in claims 13-15. To highlight the claimed subject matter, but not to change the scope of the claims substantively, claim 13 has been amended to make clear that the claim covers “A record medium encoded with recording a program that can be executed by a computer which is used to direct a computer to perform an operation of a node”. This language is specifically supported a paragraph [0055], and clearly sets forth more than an “abstract idea”. Rather, it covers a record medium encoded with instructions (i.e., the operation flows shown in Figures 5 and 6 of the application) which is most certainly tied to the technological arts, and is used to produce a concrete useful and tangible result. In view of this, the rejection should be withdrawn.

### **Rejection of Claims 1-3, 5-11, and 13-15 Under 35 U.S.C. § 102(b) and §103**

Claims 1-3, 5-11, and 13-15 stand rejected under 35 U.S.C. § 102(b) as anticipated by International Patent Publication No. WO/0228014 by Foster et al. This rejection is traversed.

For background understanding of the invention, the Examiner is requested to contrast Figure 8 of the application with Figure 1 of the application. In Figure 8, the radio network controller (91) is linked to the mobile services switching center (21) of

the circuit switched network (2). As explained on page 2, lines 8-13, communications from the user equipment (ue) (10) is carried by wireless bearer (100) to a base station in the radio access network (RAN) (9). The configuration of equipment shown in Figures 8 and 9 permits VoIP; however, as noted on page 4 of the application, because the RAN 9 and packet switching network 3 are simple access networks as used for mobile communications they cannot determine whether a call from a user is for data communications or VoIP communications. Further, the efficiency of the wireless circuit is lowered due to difficulties in bandwidth control. As explained in the last paragraph on page 4 of the application, when the wireless circuit is connected from the user equipment 10 and terminated by the RNC 91 through the NodeB in the RAN 9, a band of a maximum of 1.2 kbps and a band for headers per user are reserved in the audio communications using the CS network 2. Thus when the PS network 3 is used the available band varies, particularly when there are large volumes of data being transferred.

By contrasting Figure 1 with Figure 8 (or Figure 7 with Figure 8), in the claimed invention, there is a node which is connected to the wireless control apparatus and provided on a packet switching (PS) network side to configure a core network which has a packet switching capability. Note the RNC 91 connected directly to the SGSN 31 in Figures 1 and 7 (whereas in Figure 8, the RNC is connected to the MSC 21 of the circuit switching network 2). Claims 1 and 5 require that the node be provided on the packet switching network side so as to configure the core network of a mobile communications system. Method claim 9 and record medium claim 13 have similar requirements.

WO 02/28014 to Foster is configured like the prior art of Figure 8 of the application. As will be noted from the Abstract on the face page of Foster, transmission of VoIP is achieved using "a hybrid mode of attach whereby speech bearer path from a mobile phone (1) is transported to the network controller (4) in circuit switched mode and from thereonwards in packet mode" (emphasis added). That is, like Figure 8 of the prior art, communication in Foster proceeds to the circuit switch network (see 2 in figure 8 of the application) before going to the packet switch circuit (see 3 in Figure 8). The claimed invention however, makes the path to the

packet switching network, not the circuit switching network, and it is required that the node is provided on a packet switching (PS) network side. The referenced sections on pages 2, 3, and 4 of Foster do not disagree with the above interpretation of Foster. Thus, Foster can be viewed as an example of the known prior art which has the problems with distinguishing data and voice, as well as bandwidth control. In particular, the Examiner's attention is directed to the referenced passage on page 4 of Foster where it is stated "the speech bearer path from the mobile user is transported to NodeB/RNC in circuit mode and from there onwards in packet mode".

In short, in the claimed invention both of a CS call and a PS call are processed at a PS domain (a PS network 3 in Figure 8), that is a node of SGSN 31 which is provided in a core-network. Therefore, the node of SGSN comprises a CS-UP 313 for processing a user's data of the CS call, a PS-UP 312 for processing user's data of the PS call and a CPU 311 for processing signalling relating to both of the CS call and the PS call. An RNC 91 does not process the CS call and the PS call.

On the contrary, in Foster, both of the CS call and the PS call are processed at an RNC 4 (see Figure 1).

A current mobile communication system is roughly classified into two blocks, an RAN relating to radio and CN (core-network). The RNC is included in the RAN and nodes in the PS domain is included in the CN.

Additionally, in the mobile communication system, the RNC manages a soft-handover with movement of a mobile terminal. Therefore, it is necessary to switch the RNC with movement of the mobile terminal. In Foster, the RNC processes the CS call and the PS call, and hence the processing units for processing the CS call and the PS call have to be switched frequently with movement of the mobile terminal.

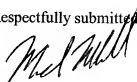
In the current invention the node in the PS network processes the CS call and the PS call, and hence the processing units for processing the CS call and the PS call do not have to be switched frequently with movement of the mobile terminal. Therefore, it is possible to suppress errors and interruption of communication generating with switching the units. As described above, the invention can provide a service of high quality by performing processes of the CS call and the PS call at the node in the PS network.

In view of this distinction, no claims can be properly deemed anticipated by or obvious over the Foster reference.

In view of the foregoing, it is respectfully submitted that Claims 1-17 are in condition for allowance. The Examiner is respectfully requested to pass the above application to issue. The Examiner is invited to contact the undersigned at the telephone number listed below, if needed.

Applicants hereby make a written conditional petition for extension of time, if required. Please charge any deficiencies in fees and credit any overpayment of fees to Attorney's Deposit Account No. 50-20451.

Respectfully submitted,



Michael E. Whitham  
Registration No. 32,635

Whitham, Curtis Christofferson & Cook, P.C.  
11491 Sunset Hills Road, Suite 340  
Reston, Virginia 20190  
Tel. (703) 787-9400  
Fax. (703) 787-7557

Customer No. 30743